CLAIMS

What is Claimed is:

1. A rotatable scanner for supporting a surveillance camera comprising:

   a. a stationary section including a base and a spindle, one end of said spindle being attached to said base, and the other end of said spindle having a plurality of annular steps;

   b. a rotatable section for rotatable engagement with said stationary section, said rotatable section including an annular support base having a central opening for receiving said spindle, said opening having annular steps that correspond to the steps of said spindle, and a cover attached to said annular support base, said cover including an exterior support for holding said camera;

   c. a motor with gear mounted on said stationary spindle inside said cover;

   d. a gear on said rotatable annular support base for engagement with said motor gear to allow said motor to cause the rotatable section to rotate relative to the stationary section; and

   e. at least one O-ring seal on one of said annular steps between said spindle and said opening.

2. The scanner of claim 1 wherein an annular lip is provided on said annular support base where said cover is attached to said base to prevent outside contaminants from reaching the inside of said cover.

3. The scanner of claim 2 wherein said annular support base has an inner surface inside said cover and an outer surface facing said spindle base, and said outside surface is radially sloped away from said central opening toward said lip in order to deflect fluids and contaminants away from the spindle.

4. The scanner of claim 3 wherein an annular ridge is provided on said sloped surface near the central opening in order to deflect fluids and contaminants away from the spindle.

5. The scanner of claim 1 wherein:

f. at least one magnetically responsive sensor is provided on said stationary section in communication with said motor, said at least one sensor being under said cover and located near the corner between said annular support base and said cover;

g. an annular plate is provided on said annular support base adjacent to and outside of said cover, said plate defining an annular track; and

h. at least one magnetic actuator is movably deployed on said track such that said at least one actuator is capable of coming into magnetically conductive proximity with said at least one sensor once per rotation of said rotatable section which generates a signal to said motor.

6. The scanner of claim 5 wherein a microprocessor is provided on said stationary section in communication with said at least one sensor and said motor, said microprocessor being programmed to receive and selectively respond to signals from said at least one sensor.

7. The scanner of claim 6 wherein the response of said microprocessor to a signal from said at least one sensor is selected from the group of: ignoring the signal, and changing the direction of rotation of the motor in response to the signal.

8. The scanner of claim 7 wherein a plurality of magnetically responsive sensors are provided on said stationary section under said cover and located near the corner between said annular support base and said cover.

9. The scanner of claim 7 wherein a plurality of magnetic actuators are movably deployed on said track such that each such actuator is capable of coming into magnetically conductive proximity with said at least one sensor once per rotation of said rotatable section.

10. The scanner of claim 8 wherein a plurality of magnetic actuators are movably deployed on said track such that each such actuator is capable of coming into magnetically conductive proximity with each of said plurality of sensors once per rotation of said rotatable section.

11. An adjustably rotatable scanner for supporting a surveillance camera comprising:

a. a stationary section including a surface mount;

b. a rotatable section including an annular support base and a cover that is rotatably engaged with said stationary section, the cover including an exterior support for holding the camera;

c. a motor with gear mounted on said stationary section;

d. a corresponding gear on said rotatable section allowing said motor to cause said rotatable section to rotate relative to said stationary section;

e. at least one magnetically responsive sensor provided on said stationary section in communication with said motor, said at least one sensor being under said cover and located near the corner between said annular support base and said cover;

f. an annular plate provided on said annular support base adjacent to and outside of said cover, said plate defining an annular track; and

g. at least one magnetic actuator movably deployed on said track such that said at least one actuator is capable of coming into magnetically conductive proximity with said at least one sensor once per rotation of said rotatable section generating a signal to said motor.

12. The scanner of claim 11 wherein a microprocessor is provided on said stationary section in communication with said at least one sensor and said motor, said microprocessor being programmed to receive and selectively respond to signals from said at least one sensor.

13. The scanner of claim 12 wherein the response of said microprocessor to a signal from said at least one sensor is selected from the group of: ignoring the signal, and changing the direction of rotation of the motor in response to the signal.

14. The scanner of claim 13 wherein an annular lip is provided on said annular support base where said cover is attached to said base to prevent outside contaminants from reaching the inside of said cover.

15. The scanner of claim 14 wherein said annular support base has an inner surface inside said cover and an outer surface facing said surface mount, and said outside surface is radially sloped away from center toward said lip in order to deflect fluids and contaminants away from the center.

16. The scanner of claim 15 wherein an annular ridge is provided on said sloped surface near the center in order to deflect fluids and contaminants away from the center.

17. The scanner of claim 16 wherein said stationary section includes a base and a spindle, one end of said spindle being attached to said base, and the other end of said spindle having a plurality of annular steps; said annular support base has a central opening for receiving said spindle, said opening having annular steps that correspond to the steps of said spindle; and at least one O-ring seal is provided on one of said annular steps between said spindle and said opening.

18. The scanner of claim 17 wherein a plurality of magnetically responsive sensors are provided on said stationary section under said cover and located near the corner between said annular support base and said cover.

19. The scanner of claim 17 wherein a plurality of magnetic actuators are movably deployed on said track such that each such actuator is capable of coming into magnetically conductive proximity with said at least one sensor once per rotation of said rotatable section.

20. A method for adjusting the arc of rotation of a scanner for a surveillance camera comprising the steps of:

a. attaching a rotatable scanner section to stationary scanner section, the rotatable section having an annular opening for receiving the stationary section, a cover for protecting the stationary section, and an exterior annular track;

b. deploying at least one magnetically responsive sensor inside the stationary section under the cover and adjacent to the track;

c. adjustably deploying at least one magnetic actuator on the track of the rotatable section such that said at least one actuator is capable of coming into magnetically conductive proximity with said at least one sensor once per rotation triggering a signal;

d. programming a microprocessor mounted on said stationary section to selectively respond to each such signal with a response selected from the group of: ignoring the signal, and changing the direction of rotation in response to the signal;

e. rotating said rotatable section relative to said stationary section; and

f. selectively changing the direction of rotation of said rotatable section according to the responses to the signals generated by said sensors.